

## DECLARATION FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below), or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

### MODULATION OF VASCULAR HEALING BY INHIBITION OF LEUKOCYTE ADHESION AND FUNCTION

the specification of which (check one)

\_\_\_\_\_ is attached hereto

X was filed on March 25, 1997  
as application Serial No. 08/823,999

\_\_\_\_\_ and was amended on: \_\_\_\_\_  
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)			Priority Claimed
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	_____
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	_____
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	_____

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

Provisional Application Number

Filing Date

\_\_\_\_\_  
(Number)

\_\_\_\_\_  
(Day/Month/Year Filed)

\_\_\_\_\_  
(Number)

\_\_\_\_\_  
(Day/Month/Year Filed)

\_\_\_\_\_  
(Number)

\_\_\_\_\_  
(Day/Month/Year Filed)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of the application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing Date)	Status (patented, pending, abandoned)
--------------------------	---------------	--

(Application Serial No.)	(Filing Date)	Status (patented, pending, abandoned)
--------------------------	---------------	--

As named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Patrea L. Pabst	31,284
D. Andrew Floam	34,597
David S. Bradin	37,783
Robert A. Hodges	P-41,074


Send Correspondence to: Patrea L. Pabst, Esq.  
ARNALL GOLDEN & GREGORY  
2800 One Atlantic Center  
1201 W. Peachtree Street  
Atlanta, GA 30309-3450


Direct telephone calls to: Patrea L. Pabst (404) 873-8794

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Campbell Rogers  
Inventor's signature [Signature] Date 7/21/97  
Residence 45 Churchill Road, Westwood, Massachusetts 02090  
Citizenship United States  
Post Office Address Same as above

**"Modulation of Vascular Healing by Inhibition  
of Leukocyte Adhesion and Function"**  
By: Campbell Rogers, et al.  
Filed: March 25, 1997  
DECLARATION

Full name of second inventor Elazer R. Edelman  
Inventor's signature  Date 4/5/07  
Residence 91 Baxter Road, Brookline, Massachusetts 02146  
Citizenship United States  
Post Office Address Same as above

Full name of third inventor Daniel I. Simon  
Inventor's signature  Date 4/9/97  
Residence 211 Dorset, Waban, Massachusetts 02168  
Citizenship United States  
Post Office Address Same as above

[illegible]

CERTIFICATE UNDER 37 CFR § 3.73(b)

Applicant: Campbell Rogers, Elazer R. Edelman and Daniel L. Simon

Application No.: 08/823,999 Filed: March 25, 1997

MODULATION OF VASCULAR HEALING BY INHIBITION

For: OF LEUKOCYTE ADHESION AND FUNCTION

BRIGHAM AND WOMEN'S

HOSPITAL, INC., a CORPORATION

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of:

An assignment of the patent application identified above from Daniel I. Simon to Brigham and Women's Hospital, Inc. for which a copy thereof is attached.

OR

A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplement sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date : 5/20/97

Name : BRIAN N. HICKS

Title : Acting Director

Signature : Ventures Department

CERTIFICATE UNDER 37 CFR § 3.73(b)



Applicant: Campbell Rogers, Elazer R. Edelman and Daniel L. Simon

Application No.: \_\_\_\_\_ Filed: March 25, 1997

MODULATION OF VASCULAR HEALING BY INHIBITION

For: OF LEUKOCYTE ADHESION AND FUNCTION

MASSACHUSETTS INSTITUTE

OF TECHNOLOGY

, a CORPORATION

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of:

An assignment of the patent application identified above from Campbell Rogers and Elazer R. Edelman to Massachusetts Institute of Technology for which a copy thereof is attached.

OR

A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplement sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

May 20, 1997

Date : \_\_\_\_\_

JARMILA Z. HRBEK

Name : \_\_\_\_\_

PATENT ADMINISTRATOR

AND OFFICE MANAGER

Title : \_\_\_\_\_

TECHNOLOGY LICENSING OFFICE

Signature : Jarmila Z. HrbeK



4uli  
UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SEPTEMBER 04, 1997

PTAS

PATREA L PABST, ESQ.  
2800 ONE ATLANTIC CTR.  
1201 W. PEACHTREE STREET  
ATLANTA, GA 30309-3450



\*100512928\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 05/27/1997

REEL/FRAME: 8640/0041  
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
ROGERS, CAMPBELL

DOC DATE: 05/19/1997

ASSIGNOR:  
EDELMAN, ELAZER R.

DOC DATE: 05/19/1997

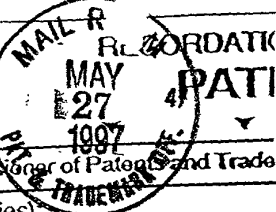
ASSIGNEE:  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
77 MASSACHUSETTS AVENUE  
CAMBRIDGE, MASSACHUSETTS 02139

SERIAL NUMBER: 08823999  
PATENT NUMBER:

FILING DATE: 03/25/1997  
ISSUE DATE:

TARA WASHINGTON, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

DOCKETED FOR MIT 7501  
BY JSH  
DATE 9-18-97

5-27-97  
Tab settings40. 1581 D.  
08-18-1997U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

100512928

documents or copy thereof

## 1. Name of conveying party(ies):

Campbell Rogers  
Elazer R. EdelmanAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other

Execution Date: May 19, 1997 and May 19, 1997

## 2. Name and address of receiving party(ies):

Name: Massachusetts Institute  
Technology

Internal Address:

Street Address: 77 Massachusetts Avenue

City: Cambridge State: MA ZIP: 02139

Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

08/823,999

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Patrea L. Pabst, Esq.

Internal Address: 2800 One Atlantic Ctr.

Street Address: 1201 W. Peachtree St.

City: Atlanta State: GA ZIP: 30309-3450

## 6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41): \$ 40.00

☒ Enclosed☐ Authorized to be charged to deposit account

## 8. Deposit account number:

01-2507

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Patrea L. Pabst

Name of Person Signing

Signature

Total number of pages comprising cover sheet:

Date

5/23/97

00000173 08823498 01 05:581 06/01/1997 JFALLAM

## ASSIGNMENT

We, Campbell Rogers of 45 Churchill Road, Westwood Massachusetts, 02090 and Elazer R. Edelman of 91 Baxter Road, Brookline, Massachusetts 02146, in consideration of Five Dollars and other valuable consideration paid to me by Massachusetts Institute of Technology, a corporation of Massachusetts having its principal place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts, 02139, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said Massachusetts Institute of Technology its successors and assigns, the entire interest for the United States of America and its territories and all foreign countries and jurisdictions including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement entitled "Modulation of Vascular Healing by Inhibition of Leukocyte Adhesion and Function" described in U.S. Serial No. 08/823,999 filed on March 25, 1997, by Campbell Rogers, Elazer R. Edelman and Daniel I. Simon, in the United States Patent and Trademark Office and in all Letters Patent of the United States of America and its territories and all foreign countries and jurisdictions which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuation, continuation-in-part, renewals, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

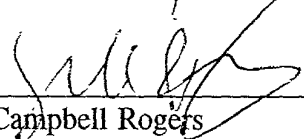
And we do hereby authorize and request the Commissioner of Patents and Trademarks



"Modulation of Vascular Healing by Inhibition  
of Leukocyte Adhesion and Function"  
By: Campbell Rogers, Elazer R. Edelman and  
Daniel L. Simon  
Filed: March 25, 1997  
ASSIGNMENT

of the United States to issue such Letters Patent as shall be granted upon said application or  
applications based thereon to said corporation, its successors and assigns.

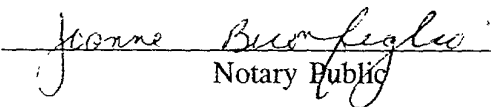
WITNESS my hand and seal this 19 day of May, 1997.

  
\_\_\_\_\_  
Campbell Rogers

Commonwealth of Massachusetts Boston, MA )  
County of Suffolk )ss.

Then personally appeared the above named Campbell Rogers and acknowledged the  
foregoing instrument to be his free act and deed, before me, this 19 day of May,  
1997.

JOANNE BUONFIGLIO  
Notary Public  
My Commission Expires May 10, 2002

  
\_\_\_\_\_  
Notary Public

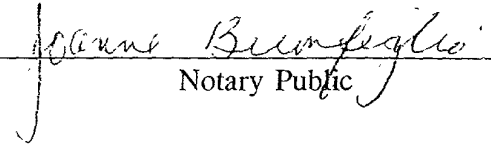
WITNESS my hand and seal this 19 day of May, 1997.

  
\_\_\_\_\_  
Elazer R. Edelman

Commonwealth of Massachusetts Boston )  
County of Suffolk )ss.

Then personally appeared the above named Elazer R. Edelman and acknowledged  
the foregoing instrument to be her free act and deed, before me, this 19 day of May,  
1997.

JOANNE BUONFIGLIO  
Notary Public  
My Commission Expires May 10, 2002

  
\_\_\_\_\_  
Notary Public



*file*  
**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SEPTEMBER 04, 1997

PTAS

PATREA L. PABST, ESQ.  
2800 ONE ATLANTIC CTR.  
1201 W. PEACHTREE STREET  
ATLANTA, GA 30309-3450



\*100512425

**UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT**

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 05/27/1997

REEL/FRAME: 8640/0123

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

SIMON, DANIEL I.

DOC DATE: 04/09/1997

ASSIGNEE:

BRIGHAM AND WOMEN'S HOPITAL, INC.  
75 FRANCIS STREET  
BOSTON, MASSACHUSETTS 02117

SERIAL NUMBER: 08823999

FILING DATE: 03/25/1997

PATENT NUMBER:

ISSUE DATE:

SHAREIL COLES, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

DOCKETED FOR MIT 7501  
BY JSH  
DATE 9-18-97

08-18-1997

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Tab settings

To the Honorable Commissioner of Patents

100512425

40/581  
attached original documents or copy thereof.

1. Name of conveying party(ies):

Daniel I. Simon

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other

Execution Date: April 9, 1997

2. Name and address of receiving party(ies):

Name: Brigham and Women's  
In

Internal Address:

Street Address: 75 Francis Street

City: Boston State: MA ZIP: 02117

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

08/823,999

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Patrea L. Pabst, Esq.

Internal Address: 2800 One Atlantic Ctr.

Street Address: 1201 W. Peachtree St.

30309-

City: Atlanta State: GA ZIP: 30309

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 40.00

☒ Enclosed

☐ Authorized to be charged to deposit account

8. Deposit account number:

01-2507

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Patrea L. Pabst

Name of Person Signing

Signature

Date

Total number of pages comprising cover sheet:

## ASSIGNMENT

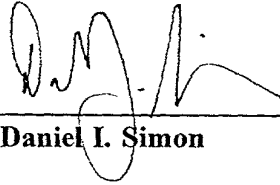
I, Daniel I. Simon of 211 Dorset, Waban, Massachusetts 02168, in consideration of Five Dollars and other valuable consideration paid to me by Brigham and Women's Hospital, Inc., a corporation of Massachusetts having its principal place of business at 75 Francis Street, Boston, Massachusetts 02117, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said Brigham and Women's Hospital, Inc., its successors and assigns, the entire interest for the United States of America and its territories and all foreign countries and jurisdictions, including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in "Modulation of Vascular Healing by Inhibition of Leukocyte Adhesion and Function" described in U.S. Serial No. 08/823,999 filed on March 25, 1997, by Campbell Rogers, Elazer R. Edelman and Daniel I. Simon, in the United States Patent and Trademark Office, and in all Letters Patent of the United States and its territories and all foreign countries and jurisdictions which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuation, continuation-in-part, reissue or other applications based in whole or in part thereon. And I agree, for myself and my executor and administrator, with said corporation and its successors and assigns but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and its territories and in all other foreign countries and jurisdictions to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

And I do hereby authorize and request the Commissioner of Patents and

"Modulation of Vascular Healing by Inhibition  
of Leukocyte Adhesion and Function"  
By: Campbell Rogers, Elazer R. Edelman and  
Daniel I. Simon  
Filed: March 25, 1997  
ASSIGNMENT

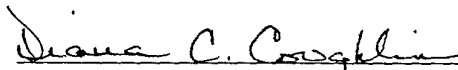
Trademarks of the United States to issue such Letters Patent as shall be granted upon  
said application or applications based thereon to said corporation, its successors and  
assigns.

WITNESS my hand and seal this 9 day of April, 1997.

  
\_\_\_\_\_  
Daniel I. Simon

Commonwealth of Massachusetts )  
County of Suffolk ) ss.

Then personally appeared the above named Daniel I. Simon and acknowledged  
the foregoing instrument to be his free act and deed, before me, this 9th day of April,  
1997.

  
\_\_\_\_\_  
Notary Public

My Commission Expires May 31, 2002